

Attorney Docket No. NITP:101US
U.S. Patent Application No. 10/734,053
Reply to Office Action of September 22, 2006
Date: November 2, 2006

Current Status of the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-12. (canceled)

13. (previously presented) A noise reducing device for diffusing a pressurized gas comprising:

 a housing comprising an inlet end and an outlet end; said inlet end comprising a plurality of orifices and said outlet end comprising at least one orifice for passing said gas therethrough; said orifices of said inlet end operatively arranged to maintain a backpressure upstream of said inlet end;

 a diffusing pack material disposed within said housing, said diffusing pack material comprising layered, knitted wire mesh, wherein said mesh is layered perpendicular to said housing;

 at last one stiffener means; said stiffener means comprising wire screen layered perpendicular to said housing and disposed within said pack material, wherein said diffusing pack material maintains contact with said outlet end and said diffusing pack material obstructs said inlet end orifices and said outlet end orifice.

14. (previously presented) The noise reducing device of Claim 13 wherein said layered, knitted wire mesh is resistant to oxidation and heat.

15. (previously presented) The noise reducing device of Claim 13 wherein said layered, knitted wire mesh comprises stainless steel.

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16. (previously presented) The noise reducing device of Claim 13 wherein said wire screen is resistant to oxidation and heat.

17. (previously presented) The noise reducing device of Claim 13 wherein said wire screen comprises stainless steel.

18. (currently amended) A noise reducing device for diffusing a pressurized gas comprising:

 a housing comprising an inlet end and an outlet end; said inlet end comprising a plurality of orifices and said outlet end comprising at least one orifice for passing said gas therethrough; said orifices of said inlet end operatively arranged to maintain a backpressure upstream of said inlet end;

 a first layer of knitted wire mesh aligned perpendicular to said housing; said first layer disposed proximate said inlet end and arranged to obstruct said inlet end orifices;

 a second wire screen layer; said wire screen layer aligned parallel and proximate said first layer;

 a third layer of knitted wire mesh aligned parallel with said second layer;

 a fourth wire screen layer; said fourth layer aligned parallel with said third layer disposed proximate said outlet end and maintaining contact therewith, wherein said fourth layer is arranged to obstruct said outlet end orifice.

19. (previously presented) The noise reducing device of Claim 18 wherein said knitted wire mesh and said wire screen layers comprise stainless steel.

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20. (new) The noise reducing device of Claim 18 wherein said inlet end orifices are operatively arranged to maintain a backpressure upstream of said inlet end greater than 5 psig.
21. (new) The noise reducing device of Claim 18 wherein said screen layers and said mesh layers form a diffusing pack material that maintains contact with an outlet face of said inlet end orifice, and said diffusing pack material obstructs said inlet end orifices and said outlet end orifice.
22. (new) The noise reducing device of Claim 18 wherein said folded mesh layers are compressed against said outlet face to a density of between 35 and 45 pounds per cubic foot.
23. (new) The noise reducing device of Claim 22 wherein said monofilament wire has a diameter between 0.006 and 0.011 inches.
24. (new) The noise reducing device of Claim 13 wherein said inlet end orifices are operatively arranged to maintain a backpressure upstream of said inlet end greater than 5 psig.
25. (new) The noise reducing device of Claim 13 wherein said wire mesh comprises monofilament wire.
26. (new) The noise reducing device of Claim 25 wherein said mesh is folded upon itself to form a plurality of folded mesh layers.
27. (new) The noise reducing device of Claim 26 wherein said folded mesh layers are compressed against said outlet face to a density of between 35 and 45 pounds per cubic foot.
28. (new) The noise reducing device of Claim 27 wherein said monofilament wire has a diameter between 0.006 and 0.011 inches.

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29. (new) The noise reducing device of Claim 28 wherein said monofilament wire is resistant to oxidation.

30. (new) The noise reducing device of Claim 28 wherein said monofilament wire is heat resistant.

31. (new) The noise reducing device of Claim 27 further comprising stiffening means disposed within said folded mesh layers; said stiffening means operatively arranged to maintain the homogeneity of said diffusing pack material density.